

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Canceled).

Claim 2 (Currently Amended): A thermally-assisted magnetic recording head capable of recording information magnetically on a recording medium, comprising:

a laser device configured to emit a light to heat the recording medium to reduce a magnetic coercive force thereof;

a light absorbing film provided between the laser device and the recording medium, the light absorbing film having an aperture through which the light is applied to the recording medium;

a magnetic pole configured to record the information magnetically on the recording medium by applying a recording magnetic field to the recording medium having the reduced coercive force; and

an optical light collecting unit configured to converge the light emitted from a light emitting face of the laser device and to direct the converged light into the aperture,

the aperture being adapted so that a polarizing direction of the light emitted from the laser device is approximately perpendicular to a direction along a longitudinal extension of recording tracks formed on the recording medium,

a width W1 of the aperture taken along the polarizing direction being smaller than a width W2 of the aperture taken approximately perpendicular to the polarizing direction,

the width W1 being shorter than 1/2 of a wavelength at the center of a spectrum of the light emitted from the laser device, and

the optical light collecting unit shifting a peak of a distribution of a light intensity of the converged light from a first position to a second position, the second position being closer to the magnetic pole than the first position.

Claim 3 (Previously Presented): The thermally-assisted magnetic recording head according to claim 2, further comprising a dielectric film provided between the laser device and the light absorbing film.

Claim 4 (Previously Presented): The thermally-assisted magnetic recording head according to claim 3, wherein an optical film thickness of the dielectric film is in a range from 0.05λ to 0.35λ relative to the wavelength λ of the light emitted from the laser device.

Claim 5 (Previously Presented): The thermally-assisted magnetic recording head according to claim 2, wherein the width W1 is within a range in which an absorption loss through the aperture of light having an electric field vector perpendicular to the direction of the aperture width W1 is 10 times as much as an absorption loss through the aperture of light having a magnetic field vector perpendicular to the direction of the aperture width W1, or even higher.

Claim 6 (Previously Presented): The thermally-assisted magnetic recording head according to claim 2, wherein the laser device is a semiconductor laser device of which laser oscillation mode is a TM mode.

Claim 7 (Previously Presented): The thermally-assisted magnetic recording head according to claim 2, further comprising an optical light collector which converges the light emitted from the laser device to direct it into the aperture.

Claim 8 (Previously Presented): The thermally-assisted magnetic recording head according to claim 2, wherein the aperture is filled with dielectric or semiconductor material.

Claims 9-19 (Canceled).

Claim 20 (Previously Presented): The thermally-assisted magnetic recording head according to claim 2, wherein the aperture has a rectangular shape.

Claim 21 (Currently Amended): A thermally-assisted magnetic recording apparatus capable of recording information magnetically on a recording medium, comprising:

- a thermally-assisted magnetic recording head; and

- an actuating mechanism configured to move the recording medium and the magnetic recording head relative to each other,

wherein the thermally-assisted magnetic recording head includes:

- a laser device configured to emit a light to heat the recording medium to reduce a magnetic coercive force thereof;

- a light absorbing film provided between the laser device and the recording medium, the light absorbing film having an aperture through which the light is applied to the recording medium;

a magnetic pole configured to record the information magnetically on the recording medium by applying a recording magnetic field to the recording medium having the reduced coercive force; and

an optical light collecting unit configured to converge the light emitted from a light emitting face of the laser device and to direct the converged light into the aperture,

the aperture being adapted so that a polarizing direction of the light emitted from the laser device is approximately perpendicular to a direction along a longitudinal extension of recording tracks formed on the recording medium,

a width of the aperture taken along the polarizing direction being smaller than a width of the aperture taken approximately perpendicular to the polarizing direction, and the width W1 being shorter than 1/2 of a wavelength at the center of a spectrum of the light emitted from the laser device, and

the optical light collecting unit shifting a peak of a distribution of a light intensity of the converged light from a first position to a second position, the second position being closer to the magnetic pole than the first position.

Claim 22 (Previously Presented): The thermally-assisted magnetic recording apparatus according to claim 21, further comprising a recording medium,

the recording medium including a record layer in which magnetic information is recorded, and an antireflection layer made of dielectric or semiconductor material deposited over the record layer.

Claim 23 (Previously Presented): The thermally-assisted magnetic recording head according to claim 2, wherein the light absorbing film has a flattened surface.

Claim 24 (Previously Presented): The thermally-assisted magnetic recording apparatus according to claim 21, wherein the light absorbing film has a flattened surface.

Claim 25 (Previously Presented): The thermally-assisted magnetic recording head according to claim 2, wherein the optical light collecting unit is a diffraction grating lens having an eccentric deployment.

Claim 26 (Previously Presented): The thermally-assisted magnetic recording head according to claim 2, wherein the optical light collecting unit has an asymmetrical distribution of a refractive index.

Claim 27 (Previously Presented): The thermally-assisted magnetic recording apparatus according to claim 21, wherein the optical light collecting unit is a diffraction grating lens having an eccentric deployment.

Claim 28 (Previously Presented): The thermally-assisted magnetic recording apparatus according to claim 21, wherein the optical light collecting unit has an asymmetrical distribution of a refractive index.